

IN THE CLAIMS

Claims 1-5 (canceled).

6. (original) An apparatus for manufacturing commercial quantities of zinc sulfide-based electroluminescent phosphor having a moisture resistant coating thereon, said apparatus comprising:

a reaction vessel having a given height and a porous disc at the bottom thereof;

a supply of phosphor particles within said vessel;

a first supply of an inert gas for fluidizing said particles, said first supply of inert gas entering said vessel through said porous disc;

a heater surrounding said reaction vessel for heating said reaction vessel to a reaction temperature;

a supply of a coating precursor;

first means for conducting said coating precursor from said supply to said reaction vessel, said first means entering said reaction vessel at said bottom of said vessel at a position above said porous disc;

a supply of a co-reactant; and

a second means for conducting said co-reactant from said supply to said reaction vessel, said second means entering said reaction vessel at a position substantially mid-way of said given height.

7. (original) The apparatus of Claim 6 wherein said reaction vessel has a diameter of 6 to 12 inches.

8. (original) The apparatus of Claim 7 wherein said reaction vessel is stainless steel.